



Final FORMER MARINE CORPS AIR STATION (MCAS) El Toro 117th Restoration Advisory Board (RAB) Meeting Summary



Meeting Location: Irvine City Hall, Irvine, California

Meeting Date/Time: 1 August 2018/1830–2025

Meeting Summary Prepared by: Gabriela Staehle, Multi-Media Environmental Compliance Group (MMEC Group), a joint venture of Wood Environment & Infrastructure Solutions, Inc. and KMEA

ATTACHMENTS:

1. Sign-In Sheets for the 1 August 2018 RAB Meeting
2. Presentation Slides: Introductory Slides
3. Presentation Slides: Time-Critical Removal Action (TCRA) Update, Installation Restoration Program (IRP) Site 1, Former MCAS El Toro, Irvine, California

ATTENDEES: Fourteen (14) people attended the RAB meeting:

Navy: Marc P. Smits, Base Realignment and Closure (BRAC) Environmental Coordinator and RAB Co-Chair; Guy Chammas, Lead Remedial Project Manager, and Rich Pribyl, Environmental Engineering Support

Regulatory Agencies: Jennifer Rich, California Environmental Protection Agency, Department of Toxic Substances Control (DTSC); John Scandura, DTSC; and Patricia Hannon, California Regional Water Quality Control Board, Santa Ana Region (RWQCB)

RAB Members: Desiré Legé; Peter Hersh, Mary Aileen Matheis; Chris Crompton; and Donald Zweifel

Other Attendees: Debby Platt, City of Irvine; Crispin Wanyoike, AECOM; Katy Robinson and Gabriela Staehle, MMEC Group

WELCOME/PLEDGE/INTRODUCTIONS/AGENDA REVIEW:

Marc P. Smits introduced himself, welcomed everyone to the Former Marine Corps Air Station (MCAS) El Toro 117th RAB meeting, and outlined the agenda for the meeting. Mr. Smits led the Pledge of Allegiance.

Self-introductions were made.

Mr. Smits explained that the agenda for the RAB meeting was not sent out until earlier today because there was a mix up in planned delivery to the RAB members one week in advance. In the future, RAB members and others will be notified early enough for them to make plans to attend the meeting.

OLD BUSINESS:

Mr. Smits opened the floor for discussion of old business and announcements. Mr. Smits said that the Navy does not have any announcements.

NEW BUSINESS:

Mr. Smits stated that he is thinking of having an additional RAB meeting in November or December 2018 after IRP Site 1 work is complete. Additional RAB meetings will take place on 20 March and 7 August 2019.

Mr. Smits reviewed the introductory slides and discussed various locations for reviewing key documents, including the Administrative Record File in San Diego, California, and the Information Repository in Irvine, California. Mr. Smits said that website resources are also listed at the end of the slides. He highlighted the websites for Orange County Great Park, Great Park Conservancy, and Heritage Fields (web addresses listed on the slides in Attachment 2).

Mr. Smits reviewed the RAB Meeting Summary timeline and the RAB Mission Statement.

Mr. Smits described a figure in the introductory slides to show the RAB members that only five parcels are left to transfer. All other parcels have been transferred in the last 10 to 15 years. Over 95% of the base has been transferred.

Regulatory Agency Comments/Update

Ms. Rich reviewed the progress made by DTSC since the last RAB meeting (13 September 2017):

- Completed review of 10 Operation and Maintenance (O&M) and Long-Term Monitoring reports related to IRP Sites 1 and 2, 16, 18 and 24, and the landfills
- Currently reviewing four more reports
- Reviewed and concurred with an Operating Properly and Successfully (OPS) Report for IRP Sites 1 and 2 Groundwater
- Conducted two site visits: IRP Site 3 Waste Area C1 and the Wildlife Corridor (near IRP Site 5)
- Reviewed two Project Environmental Review Forms (PERFs): Wildlife Corridor by FivePoint Communities and third-party sampling by the City of Irvine
- Reviewed documents for Hangar 296 and continued to coordinate with the California Department of Public Health to achieve unrestricted radiological release (URR) determination for the hangar and a portion of the sanitary sewer line
- Reviewed the Draft Covenant to Restrict Use of Property (CRUP) for IRP Site 5
- Reviewed TCRA planning documents for IRP Site 1

Mr. Zweifel asked whether there was evidence of radiological release at Hangar 296; Ms. Rich responded that there is not.

Ms. Hannon stated that RWQCB reviewed the same documents reviewed by DTSC. The exception is that RWQCB is solely reviewing Draft Addendum 1 to the Draft Closure Report for Underground Storage Tank (UST) Site 398, which is the final UST site at Former MCAS El Toro out of approximately 400 USTs historically located at MCAS El Toro. The Navy is requesting closure for this site and has

submitted the report to RWQCB to review. In addition, RWQCB is in the process of reviewing the Draft CRUP for IRP Site 5.

Mr. Crompton asked for an update on the major pipeline that transfers fuel to Former MCAS El Toro. Mr. Chammas responded that the pipeline came from Defense Fuel Supply Point Norwalk. The pipeline also supplied Former MCAS Tustin and entered Former MCAS El Toro El Toro at former Tank Farm 555, which contained five 500,000-gallon USTs. A year or two ago, the Navy filled the five tanks with cellular concrete to remove void space. The Navy has received closure for the USTs, groundwater, and soil. The property (Carve-Out II-F-3) was transferred to Heritage Fields, which subsequently transferred it to Heritage Hills. The area is being used as open space.

Election of Community Member RAB Co-Chair

Mr. Smits asked whether the RAB members were open to having an election for the RAB Community Co-Chair. Mr. Smits explained that the RAB Community Co-Chair coordinates with other RAB members regarding RAB meeting summaries. Mr. Zweifel offered to be the new RAB Community Co-Chair. Mr. Smits suggested that they confirm the election at the end of the RAB meeting.

Mr. Zweifel asked when the Former MCAS El Toro RAB would close. Mr. Smits stated that when the Record of Decision for Site 1 is final, the RAB will close, and that is at least a year away. Mr. Chammas clarified that the sites would still be part of the five-year review process.

PRESENTATION – Time-Critical Removal Action (TCRA) Update

Mr. Smits introduced the presentation, and Mr. Pribyl began the presentation.

Slide 1: Title. Mr. Pribyl introduced himself.

Slide 2: Presentation Organization. The slide includes a list of topics discussed in the presentation: Presentation and Overview, Site Maps and Orientation, Background, Historical Summary/Conceptual Site Model (CSM), Progress Update, Technical Approach, Schedule, and Summary. Mr. Pribyl gave an overview of each section included in the presentation.

Slide 3: Presentation Overview. Mr. Pribyl reviewed the main takeaways of the presentation, including the investigation history of IRP Site 1, the CSM, and the comprehensive TCRA (2018). Mr. Pribyl stated that the Navy has a solid understanding of the site. As the Navy moves forward, it will continue to assess whether the conditions match the CSM. Mr. Zweifel asked why two site characterizations were conducted. Mr. Pribyl responded that after the initial munitions characterization in 2002, it became clear that the investigation needed to extend outside of the base, which led to the 2008 munitions characterization and subsequently the 2010 TCRA. Mr. Pribyl explained that the 2018 TCRA will include munitions constituent (MC) sampling, excavation and mechanical screening, digital geophysical mapping (DGM), intrusive investigation, and backfill and restoration.

Slide 4: Location Map. The slide contains a map of Former MCAS El Toro. IRP Site 1 including the Adjacent Property are notated on the map. The Explosive Ordnance Disposal (EOD) Training Range is included in IRP Site 1, and the Adjacent Property has subareas that are described in the next slide.

Slide 5: Site Map. The slide shows a figure with the following features labeled: Adjacent Property (TCRA), Agua Chinon Retarding Basin (owned by Orange County Flood Control District), Area C (owned by The Irvine Company), Area B (TCRA) (owned by Orange County Flood Control District),

Area B (Remedial Action), EOD Training Range Perimeter Fence, Northern and Southern EOD Training Range Boundaries, IRP Site 1, and the Former MCAS El Toro boundary. Mr. Pribyl stated that the next slide lists the corresponding areas of each TCRA project area. Mr. Compton asked why the “Adjacent Property” was named as it was; Mr. Pribyl responded that it was named “Adjacent Property” to clarify that it had never been a part of Former MCAS El Toro.

Slide 6: Background – IRP Site 1 Soil. Mr. Pribyl briefly reviewed the acreage of the features in the Slide 5 Site Map. The EOD Training Range is approximately 74 acres, the Adjacent Property (never Navy-owned) is approximately 56.1 acres, and the Adjacent Property (TCRA) will include 20 acres.

Slide 7: Historical Summary/CSM. Mr. Pribyl reviewed the previous investigations conducted at the EOD Training Range and Adjacent Property. Munitions characterization efforts were conducted in 2002 and 2008. The 2008 munitions characterization extended into the Adjacent Property, which prompted the Navy to take action in the Adjacent Property. In the 2010 TCRA, the Navy completed surface and subsurface removal of anomalies on the Adjacent Property, but the Agua Chinon Retarding Basin was not included. A total of 92% of all 2010 TCRA targets investigated were in the top 5 inches of soil, and 99% of all the munitions and explosives of concern (MEC) items recovered were in the top 8 inches. The CSM was developed based on these previous investigations. The main MEC item of concern was the 20-millimeter (mm) explosive round. The density of munitions potentially presenting an explosive hazard (MPPEH) is approximately one item per acre. Mr. Zweifel asked whether the Santiago Fire caused any secondary explosions from the MPPEH; Mr. Pribyl responded that he had not heard any reports of this occurring.

Slide 8: 20-mm Explosive Round. The slide shows two examples of 20-mm explosive rounds. Most of the material removed during the 2010 TCRA was just the projectile, which is about the size of a golf ball. In the right photo, the contents shown in the bucket are from the 2008 investigation of the EOD Training Range, but they are consistent with items found on the Adjacent Property during the 2010 TCRA.

Slides 9 and 10: Progress Update. Mr. Pribyl reviewed actions that have been completed. MC sampling was completed on 26 July 2018. The Navy is working toward unrestricted use for the site. Mr. Zweifel asked who decided to reduce the TCRA area to 20 acres; Mr. Pribyl responded that the Navy had decided to reduce the TCRA property in coordination with the Agencies. Mr. Zweifel asked whether there are any Native American artifacts; Mr. Pribyl explained that the cultural resource areas have been characterized. As part of the TCRA, the Navy was required to address cultural and biological resources. The Navy received concurrence from the State Historic Preservation Office that a cultural site located in the TCRA project area is not eligible for listing on the National Register of Historic Places. However, as a conservative measure, the Navy will have a full-time cultural monitor on-site during fieldwork in Area C. Mr. Zweifel asked whether endangered species are on the site; Mr. Pribyl explained that two biological resources of concern are at the site: coastal California gnatcatcher and least Bell’s vireo. Biological monitoring is ongoing and a full-time biologist will be on site when heavy equipment is in use during the TCRA.

Slide 11: Technical Approach. Mr. Pribyl explained that Area B (TCRA), Area C, and the Agua Chinon Retarding Basin follow roughly the same alternative. Area A, the remainder of Area B, and the EOD Training Range require remedial action.

Slides 12 and 13: Technical Approach: Adjacent Property. Slide 12 contains a flow chart for the technical approach for the Adjacent Property (TCRA) area. The approach is consistent with Alternative 4 in the 2014 Feasibility Study (FS). The Navy is attempting to achieve an unrestricted use designation. Slide 13 describes the study boundaries and discusses MC sampling. The focus of Slide 13 is representative

sampling unit (SU) placement. The Navy collected surficial soil at a depth of less than 4 inches below ground surface, which is consistent with the depth of a majority of munitions found during the 2010 TCRA and the CSM. Regarding MC sampling, seven project area incremental sampling methodology (ISM) SUs and two background ISM SUs were chosen. Three samples will be collected from each SU. Mr. Crompton asked how the Navy will address the Agua Chinon Retarding Basin, considering that it is a disturbed area. Mr. Pribyl explained that the Navy reviewed information regarding the construction and O&M of the Agua Chinon Retarding Basin and in coordination with the Agencies determined that it would be best to focus sampling efforts on Areas B (TCRA) and C. The Navy chose to collect samples in those areas because they would be most likely to have any remaining impacts. If the Navy finds an issue in these areas, the Navy will decide, in conjunction with the Agencies, whether modifications to the CSM and TCRA would be appropriate.

Slides 14 and 15: Technical Approach: Areas B (TCRA) and C. Slide 14 contains a figure indicating ISM SUs in Areas B (TCRA) and C. Two SUs are visible in Area B (TCRA) and five SUs are visible in Area C. Two SUs are outside of the Adjacent Property boundary and samples from these SUs will function as background samples. The dots on the figure indicate the locations where material documented as safe and material documented as an explosive hazard were found during the 2010 TCRA. Slide 14 provides details on the grid sampling. Mr. Crompton asked whether the Navy investigated downstream of the site. Mr. Pribyl responded that in the 2010 TCRA, the area was investigated to its limits with high confidence. Mr. Smits added that previous investigations helped define the spatial boundary for the 2010 TCRA. Slide 15 describes the sampling process. Three ISM increments will be collected per grid: primary, replicate, and triplicate. Triplicate increments will be collected in a different sequence and orientation to make sure bias is not created by the order of collection. For each ISM sample prepared (3 per SU):

- Area C and the background SUs contain a 7x7 grid with 49 increments.
- Area B (TCRA) SUs contain a 5x6 grid with 30 increments.

Mr. Zweifel asked how much this process will cost; Mr. Pribyl responded that ISM is intended to get a representative sample over a large area as a more cost-effective method. Mr. Smits added that the entire IRP Site 1 Adjacent Property TCRA will cost the Navy approximately \$2.5 million. Mr. Smits added that the Navy wants to be sure that after this action is completed, everyone agrees (including the Agencies) that this was the final action.

Slides 16 and 17: Technical Approach: Areas B (TCRA) and C. Slide 16 includes actions to be taken following sampling, including vegetation removal, excavation of the top 12 inches of soil, and soil screening. Mr. Zweifel asked whether the Navy will excavate the Agua Chinon Retarding Basin; Mr. Pribyl responded that the Navy will not, as significant excavation was completed during the construction of the basin, and since construction, routine maintenance has removed accumulated sediment. Slide 17 describes the process for DGM, which can detect items to depths of 12–18 inches and narrows the focus. Intrusive investigations will be completed in areas surrounding the items identified by the DGM. MMEC Group will provide third-party quality assurance. One aspect of this process is that MMEC Group will plant blind seeds each day, which will allow the Navy to monitor the success of the recovery of these items. After this process, the site will be backfilled and revegetated with a native plant seed mix. Ms. Legé asked for clarification on the steps of the process. Mr. Pribyl explained the steps: conducting sampling, grading the soil, screening the soil, completing DGM work, investigating where necessary, and finally backfilling the area. Mr. Crompton asked how many acres would be screened. Mr. Pribyl responded that 5.6 acres were to be investigated for Area B (TCRA) and Area C. Mr. Compton asked whether a Storm Water Pollution Prevention Plan (SWPPP) will be used; Mr. Pribyl responded that the Navy has a SWPPP in place. Mr. Zweifel asked whether an irrigation system will be added during the

revegetation process. Ms. Rich added that a Site Restoration Plan is included in the TCRA Work Plan which provides details on the restoration activities.

Slide 18: Technical Approach: Agua Chinon Retarding Basin. The Navy will not conduct sampling at Agua Chinon Retarding Basin. Vegetation will be trimmed, rather than removed, to support site restoration efforts. The vegetation will be trimmed to allow DGM and intrusive investigation. After DGM and intrusive investigation, the site will be backfilled and restored.

Slide 19: Contingent Technical Approach. When excavating, it may be necessary for the Navy to use different pieces of equipment or to change the approach angle. The Navy may need to use a portable DGM or metal detector.

Slide 20: Schedule. Mr. Pribyl reviewed the schedule:

- Issue Draft Work Plan – early August 2018
- Implement TCRA – late August 2018
- Complete TCRA – late September 2018
- Issue Draft Removal Action Report – November 2018

Slide 21: Summary: Mr. Pribyl briefly reviewed the presentation. In response to a question from Mr. Zweifel, Mr. Pribyl reviewed all the work that has already gone into the IRP Site 1 TCRA. Ms. Legé asked whether the Navy had considered grading 3 feet of soil instead of collecting samples. Mr. Pribyl said that the sampling will take only three days, the analysis will only cost a few thousand dollars and is also necessary to characterize the soil to determine soil stockpile management requirements and final disposition. The results will provide an extra line of evidence to support reuse of the site. The sampling is required to prove to the Agencies that a chemical impact has not occurred.

Slide 22: Acronyms

Slide 23: Navy Contact Information

MEETING EVALUATION:

Mr. Zweifel said it was an excellent RAB meeting.

MEETING CONCLUSION:

Mr. Smits revisited the RAB Community Co-Chair election. Mr. Zweifel was elected as the new RAB Community Co-Chair. Mr. Smits told Mr. Zweifel that he would coordinate with him regarding the meeting summary.

Mr. Smits said he wanted to have the next RAB meeting in November 2018.

The meeting was adjourned at 2025.

PREVIOUS RAB MEETING SUMMARIES:

Copies of the RAB meeting summaries and handouts are available at the Information Repository located in the Government Publication Section of the Heritage Park Regional Library in Irvine, California. Library hours are 10:00 a.m. to 8:00 p.m. Monday through Thursday and 9:00 a.m. to 5:00 p.m. Friday through Sunday. The library phone number is (949) 936-4040. In addition, copies of the meeting minutes and handouts are available in the CERCLA Administrative Record File. Final meeting summaries from previous RAB meetings can also be found on the internet at the Navy BRAC PMO website: <http://www.bracpmo.navy.mil/>

LIST OF HANDOUTS PROVIDED AT THE MEETING:

- Presentation: Time-Critical Removal Action (TCRA) Update, Installation Restoration Program (IRP) Site 1 Adjacent Property, Former MCAS El Toro, Irvine, California
- Aerial Map of Former MCAS El Toro
- RAB Application
- RAB Mailing List Application
- Former MCAS El Toro Where to Get More Information

ENVIRONMENTAL WEBSITES:

Navy and Department of Defense Websites

Navy BRAC PMO website (includes RAB meeting minutes): www.bracpmo.navy.mil/

Department of Defense – Environmental Cleanup website: www.denix.osd.mil

USEPA Websites

Homepage: www.epa.gov

Superfund: www.epa.gov/superfund

National Center for Environmental Assessment: www.epa.gov/ncea

Federal Register Environmental Documents: www.epa.gov/federalregister

California Agency Websites

California Environmental Protection Agency homepage: www.calepa.ca.gov

DTSC: www.dtsc.ca.gov

Department of Public Health: www.cdph.ca.gov

RWQCB: www.waterboards.ca.gov/santaana

Reuse and Redevelopment Websites

Orange County Great Park: www.ocgp.org

Great Park Conservancy: www.orangecountygreatpark.org

Heritage Fields El Toro, LLC (A joint venture managed by FivePoint Communities):
www.greatparkneighborhoods.com

City of Irvine Planning Commission: www.ci.irvine.ca.us/council/comms/planning/default.asp

GUEST SIGN IN

FORMER MCAS EL TORO RAB MEETING- SIGN-IN SHEET

August 1, 2018

NAME <u>PLEASE PRINT</u> <u>CLEARLY</u>	AFFILIATION (community member/resident, elected official, agency official)	MAILING ADDRESS	PHONE EMAIL FAX	SHOULD WE ADD YOU TO THE MAILING LIST? (yes/no)	NEW TO MEETING? HOW DID YOU HEAR ABOUT THIS MEETING
Katy Robinson	NNEC Group	—	—	N	—
Debby Platt	City of Irvine				
Gabbi Staehle	NNEC Group				
Crispin Wanyonie	AECOM				

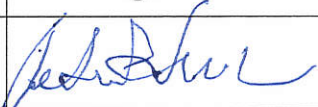
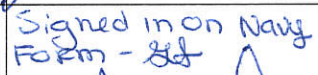


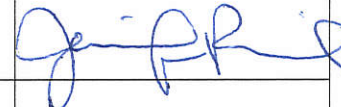
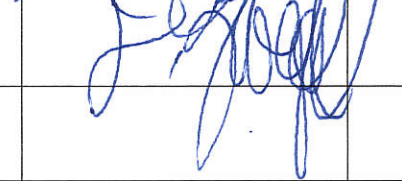
FORMER MCAS EL TORO

RESTORATION ADVISORY BOARD MEETING

AGENCY AND RAB MEMBER SIGN-IN SHEET

August 1, 2018

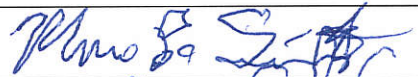




Please sign in on the appropriate line. If your address and/or phone number has recently changed, help us update our records by writing your new information on the back of the sign-in sheet. Thank you.

Name	Signature	Phone Number	Name	Signature
Peter Hersh			Mary Aycock, U.S. EPA	
Mary Aileen Matheis	Signed in on Navy Form - 		Viola Cooper, U.S. EPA	
Chris Crompton			Patricia Hannon, RWQCB	Attended, but did not sign in.
Roy Herndon			Cindy Li, RWQCB	
Desire' Chandler			Jennifer Rich, DTSC	
Donald Zweifel			Scott Warren, DTSC	
			Greg Shaffer, DTSC	
			John Scandura, DTSC	Attended, but did not sign in.

FORMER MCAS EL TORO RESTORATION ADVISORY BOARD MEETING

NAVY SIGN-IN SHEET

August 1, 2018

Name	Signature
Marc P. Smits, BRAC Environmental Coordinator and RAB Co-Chair	
Guy Chammas, Navy Lead RPM	
Rich Pribyl, Environmental Engineering Support	
Alex Bollweg, Environmental Engineering Support	
Kristyn Drake, Environmental Engineering Support	
	

WELCOME



117th Former MCAS El Toro Restoration Advisory Board (RAB) Meeting

August 1, 2018

6:30–8:00 pm

Agenda

Former MCAS El Toro

Restoration Advisory Board (RAB) Meeting Agenda



Former MCAS El Toro
Restoration Advisory Board

August 1, 2018

6:30–8:00 pm

117th RAB Meeting

♦ ♦ ♦

Location
Irvine City Hall

Room L-102
1 Civic Center Plaza
Irvine, CA 92602

AGENDA

RAB members that are unable to attend please inform Marc P. Smits, Navy RAB Co-Chair, at (619) 524-4610 or marc.smits@navy.mil

Welcome/Pledge/Introductions/Agenda Review (6:30–6:35)

Marc P. Smits
BRAC Environmental Coordinator (BEC)
Navy RAB Co-Chair

Old Business (6:35–6:45)

- ❖ Announcements/Review of Action Items

Marc P. Smits
BEC/Navy RAB Co-Chair

New Business (6:45–7:55)

- ❖ Regulatory Agency Comments/Update (6:45–7:00)
- ❖ Election of Community Member RAB Co-Chair (7:00–7:10)
- ❖ IRP Site 1 Time-Critical Removal Action Update (7:10–7:55)

Federal Rep
Mary Aycock
U.S. EPA

State Rep
Jennifer Rich
Cal/EPA/DTSC

State Rep
Patricia Hannon
Cal/EPA/RWQCB

Richard Pribyl
Navy Env. Engin. Support

Meeting Summary & Closing (7:55–8:00)

- ❖ Meeting Evaluation and Suggestions for Future Meeting Topics

Marc P. Smits

Points of Contact



Navy

Mr. Marc P. Smits*

**Base Realignment and Closure (BRAC)
Environmental Coordinator**

Former MCAS El Toro

BRAC Program Management Office West

33000 Nixie Way, Building 50

San Diego, CA 92147

(619) 524-4610

marc.smits@navy.mil

Agency Representatives

Ms. Mary Aycock*

Remedial Project Manager

U.S. EPA Region IX

75 Hawthorne St. (SFD-H-8)

San Francisco, CA 94105

(415) 972-3289

mary.aycock@epa.gov

Ms. Patricia Hannon*

Remedial Project Manager

Cal/EPA, Regional Water Quality

Control Board, Santa Ana Region

3737 Main Street, Suite 500

Riverside, CA 92501-3348

(951) 782-4498

patricia.hannon@waterboards.ca.gov

Ms. Jennifer Rich*

Remedial Project Manager

Cal/EPA, Department of Toxic

Substances Control

5796 Corporate Avenue

Cypress, CA 90630

(714) 484-5415

jennifer.rich@dtsc.ca.gov

RAB Contacts

To be elected

RAB Community Co-Chair

*** BRAC Cleanup Team (BCT) Members**

Locations for Reviewing Key Documents



Administrative Record File

Naval Facilities Engineering Command Southwest
1220 Pacific Highway, Code EV33
Naval Base San Diego Building 3519
San Diego, CA 92132

Contact: Ms. Diane Silva
Administrative Records Coordinator
(619) 556-1280

Information Repository

Heritage Park Regional Library
14361 Yale Avenue, Irvine, CA
(949) 936-4040

Environmental Websites



Navy Base Realignment and Closure (BRAC) Program Management Office (PMO):

www.bracpmo.navy.mil

Department of Defense - Environmental:

www.denix.osd.mil

U.S. EPA:

Homepage: www.epa.gov

Superfund: www.epa.gov/superfund

National Center for Environmental Assessment: www.epa.gov/ncea

Federal Register Environmental Documents: www.epa.gov/federalregister

Cal/EPA:

Homepage: www.calepa.ca.gov

Department of Toxic Substances Control: www.dtsc.ca.gov

Department of Public Health: www.cdph.ca.gov

Regional Water Quality Control Board: www.waterboards.ca.gov/santaana

Reuse/Redevelopment Websites



Orange County Great Park:

www.ocgp.org

Great Park Conservancy:

www.orangecountygreatpark.org

Heritage Fields El Toro, LLC

(A joint venture managed by FivePoint Communities):

www.greatparkneighborhoods.com

City of Irvine Planning Commission:

www.ci.irvine.ca.us/council/comms/planning/default.asp

Potential 2019 RAB Meeting Schedule



RAB Meetings: The Conference and Training Center (CTC) at Irvine City Hall is reserved for RAB meetings (open to the public) on Wednesday evenings. Dates are listed below. Time: 6:30–8:00 p.m.

Potential RAB Meeting Dates	RAB Meeting Room 6:30–8:00 p.m.
March 20, 2019	CTC
August 7, 2019	CTC

RAB Meeting Summaries



- BCT received community feedback to turnaround RAB Meeting Summaries faster
- Draft RAB Meeting Summaries will be sent via email to RAB Members approximately 45 days after RAB meeting
- RAB Members will have 14 days to provide comments to the RAB Community Co-Chair (to be elected)
- RAB Community Co-Chair to provide all comments to the Navy Co-Chair (Mr. Smits) within 21 days
- Final RAB Meeting Summaries provided in the next RAB mailer and posted to the Navy BRAC website

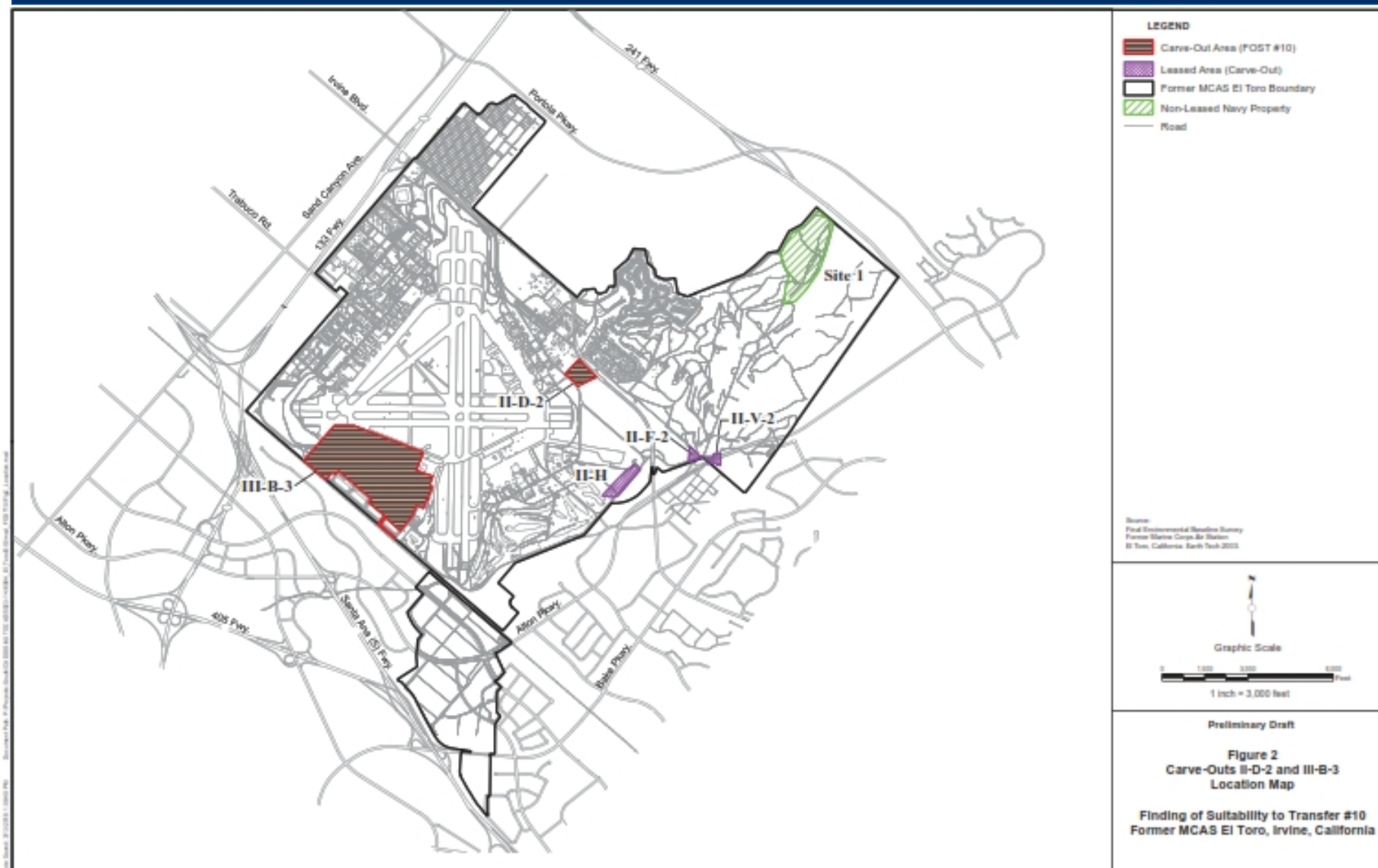
RAB Mission Statement



Excerpt:

The mission of the RAB is to promote community awareness and obtain timely constructive community review and comment on proposed environmental restoration actions to accelerate the clean-up and property transfer of MCAS El Toro. The RAB serves as a forum for the presentation of comments and recommendations to U.S. Marine Corps (Navy) and Remedial Project Managers (RPMs) of the U.S. Environmental Protection Agency (U.S. EPA), and the Department of Toxic Substances Control (DTSC).

FOST Transfer Map



Time-Critical Removal Action (TCRA) Update

INSTALLATION RESTORATION PROGRAM SITE 1

FORMER MARINE CORPS AIR STATION EL TORO

IRVINE, CALIFORNIA

MARC P. SMITS, PE, Base Realignment and Closure (BRAC) Environmental Coordinator
RICHARD J. PRIBYL, Contracted Environmental Engineering Support
U.S. Department of the Navy (Navy) BRAC Program Management Office West
San Diego, California

1 August 2018

Presentation Organization



- **Presentation Organization & Overview**
- **Site Maps & Orientation**
- **Background**
- **Historical Summary/Conceptual Site Model (CSM)**
- **Progress Update**
- **Technical Approach**
- **Schedule**
- **Summary**

Presentation Overview



- **Significant Site Data**

- Site characterizations (2002 and 2008)
- Surface and subsurface removals (2010 TCRA)

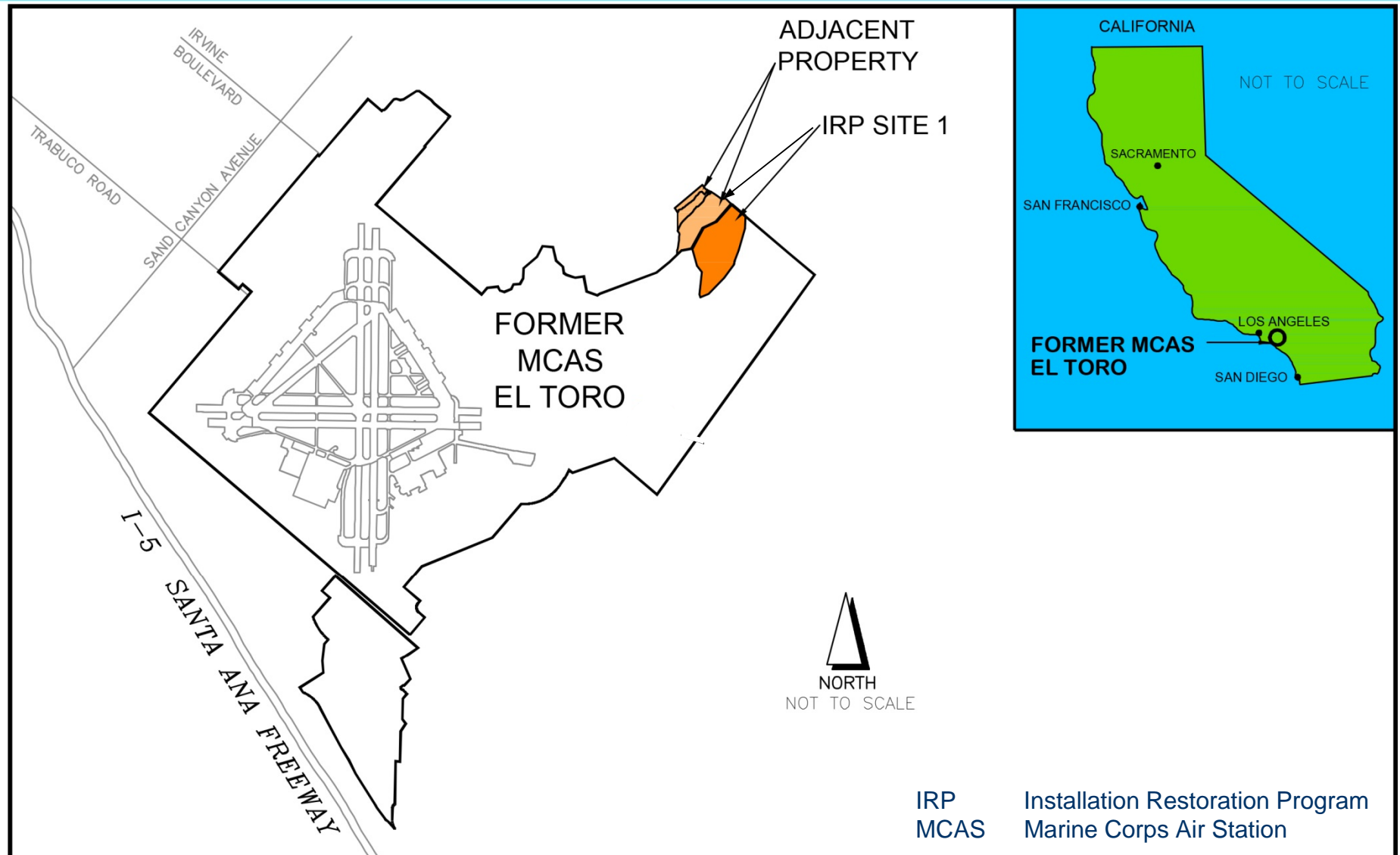
- **CSM**

- Shallow material potentially presenting an explosive hazard (MPPEH) from kick-outs
 - 2 munitions and explosives of concern (MEC)
 - 4 material documented as safe (MDAS) items
- Validated through previous characterizations and removal action

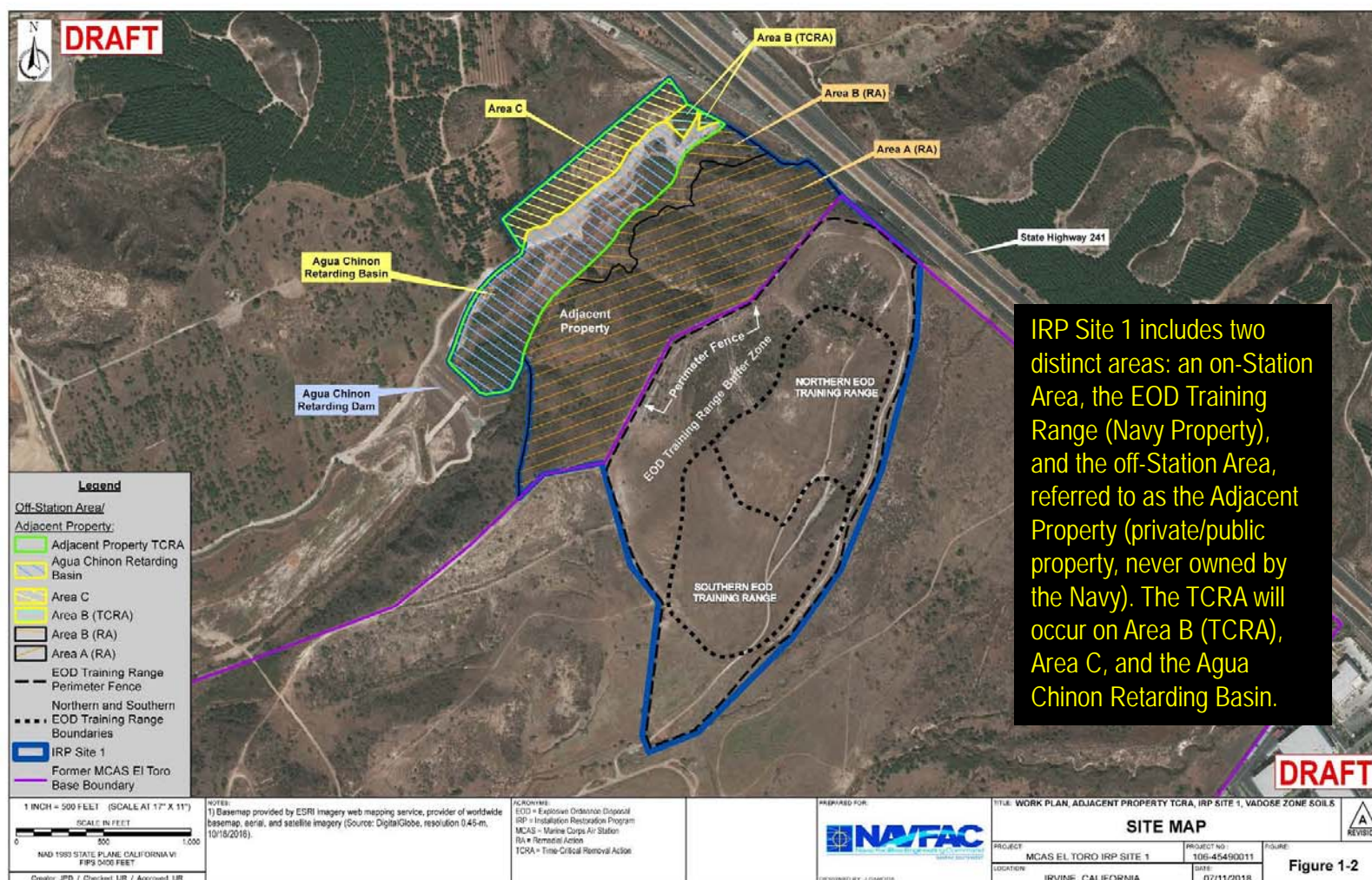
- **Comprehensive TCRA (2018)**

- Munitions constituents (MC) sampling
- Excavation and mechanical screening
- Digital geophysical mapping (DGM)
- Intrusive investigation (to depth of detection to remove MPPEH)
- Backfill and restoration

Location Map



Site Map



Background – IRP Site 1 Soil



- **EOD Training Range (Range)**
 - Approximately 74 acres
 - MEC-impacted soil and limited area of naphthalene-impacted soil (approximately 300 square feet)
- **Adjacent Property (never Navy-owned)**
 - 56.1-acre open space immediately west of the Range
 - Area A: 32.4 acres
 - Area B: 4.2 acres
 - Area C: 5.1 acres
 - Agua Chinon Retarding Basin: 14.4 acres
- **Adjacent Property (TCRA)**
 - Approximately 20 acres
 - Area B (TCRA): 0.5 acre
 - Area C: 5.1 acres
 - Agua Chinon Retarding Basin: 14.4 acres

Historical Summary/CSM



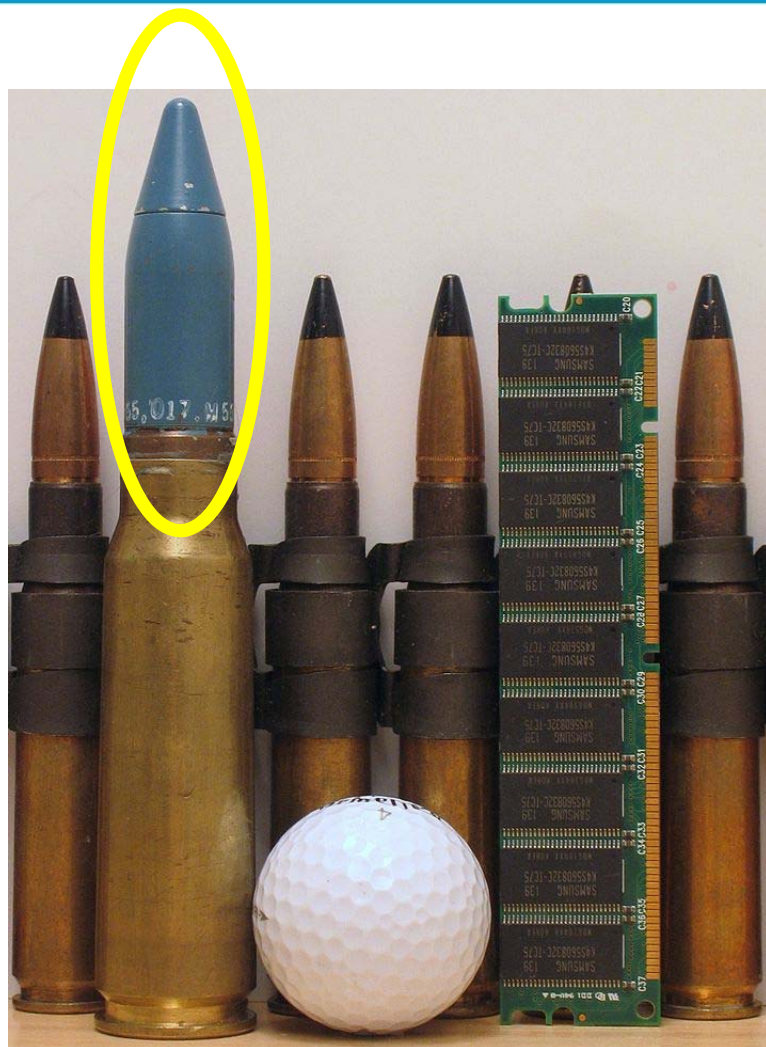
- **Previous Investigations/Actions**

- 2002 Munitions Characterization (Range only)
- 2008 Munitions Characterization (Range and Adjacent Property)
- 2010 TCRA: surface and subsurface removals (Adjacent Property)
 - 92% of all 2010 TCRA targets investigated were in the top 5 inches
 - 99% of all MEC items recovered were in the top 8 inches

- **CSM**

- Surface and shallow MPPEH from Range kick-outs
- Primary MEC item of concern: 20-millimeter (mm) explosive round
- 2008 and 2010 results support that most MPPEH has been removed from the Adjacent Property
- Average density of MPPEH in TCRA area: ~1 item/acre
- CSM validated through previous characterizations and removal action

20-mm Explosive Round



http://upload.wikimedia.org/wikipedia/en/7/71/50BMG_size_comparison.JPG, Ry Jones



U. S. Navy BRAC Program Management Office West

Progress Update



- **Draft Action Memorandum/Public Notice – 2 Nov 2016**
- **Final Accident Prevention Plan – 29 Dec 2016**
- **Final Explosives Safety Submission – 6 Mar 2017**
- ***Technical Approach Adjusted***
 - *Reduced TCRA area to 20 acres*
 - *Adopted site-specific unrestricted use protocol with soil sampling*
 - *Investigated a potential cultural resource area*
- **Draft Final Action Memorandum – 14 Feb 2018**
- **Final Action Memorandum – 24 July 2018**
 - Revision 1 – 27 July 2018
- **Draft Final Sampling and Analysis Plan – 24 July 2018**
- **MC Sampling – completed 26 July 2018**

Progress Update (cont.)



- **Cultural Resources**

- On 6 Mar 2018, the Navy received State Historic Preservation Office concurrence that CA-ORA-1311 Locus B is not eligible for listing on the National Register of Historic Places
- A cultural monitor will be on site during fieldwork in Area C

- **Biological Resources**

- Potential for the coastal California gnatcatcher and least Bell's vireo
- Biological management/monitoring is currently being performed
 - A preconstruction survey was conducted on 10 and 11 Feb 2018
 - Periodic site visits (~2 times a week) were reinitiated in Jun 2018
 - Full-time biological monitoring will be provided when major field activities begin at the end of Aug 2018
 - Results will be compiled for reporting process

Technical Approach



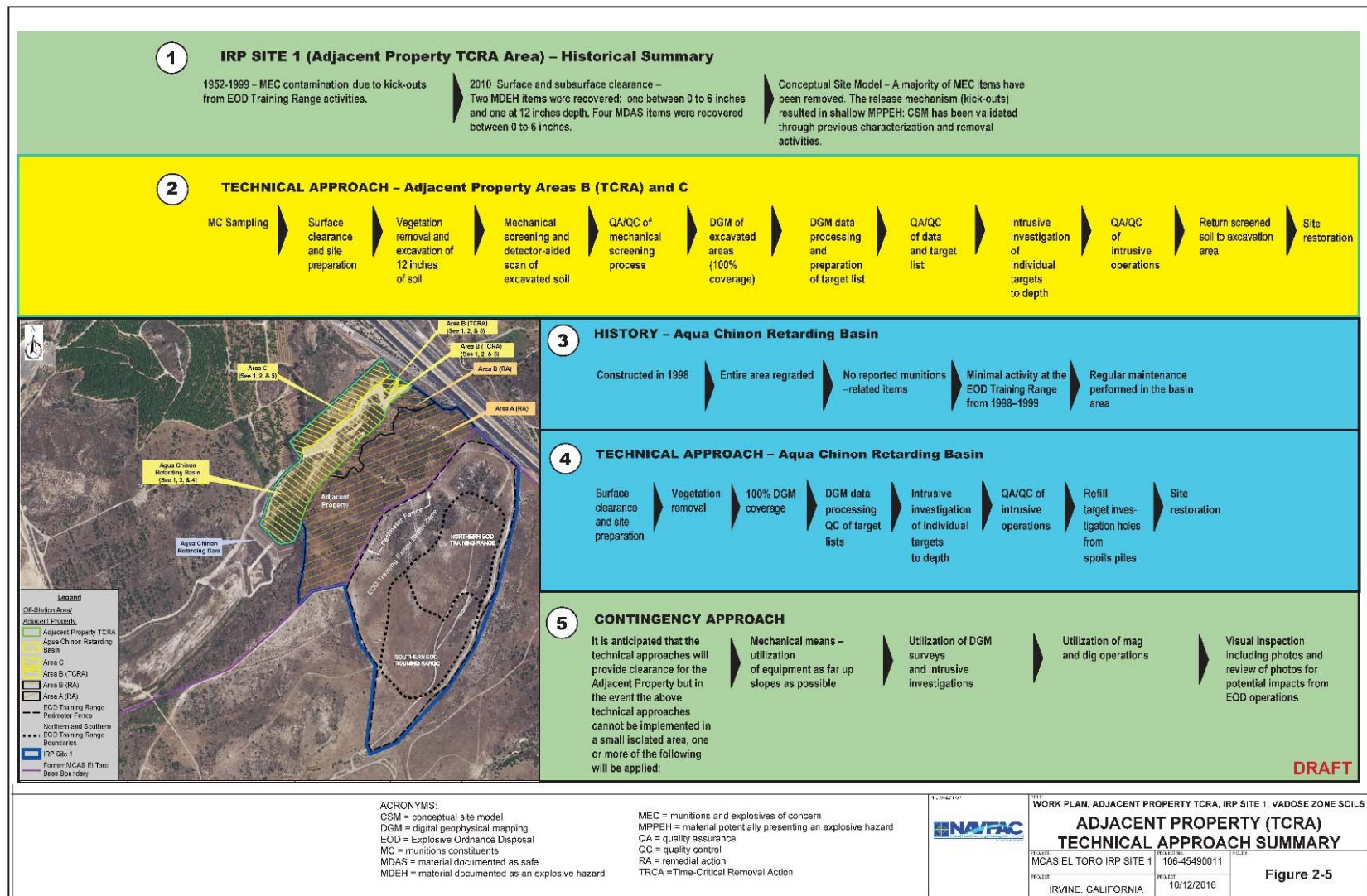
- **Areas B (TCRA), C & Agua Chinon Retarding Basin**

- Follow Alternative AP4 and as described in the Action Memorandum and TCRA Work Plan
- Revise planning documents (Action Memorandum and TCRA Work Plan) including preparation of a Sampling and Analysis Plan for MC sampling
- Conduct removal action to support unrestricted use
- Complete the TCRA (intended to be the final action for MEC-impacted soil)
- Provide one-time notifications; 5-year reviews will not be required

- **Remedial Action**

- Area A and the remaining portion of Area B
- EOD Training Range

Technical Approach: Adjacent Property



Technical Approach: Adjacent Property (cont.)



- **Study Boundaries**

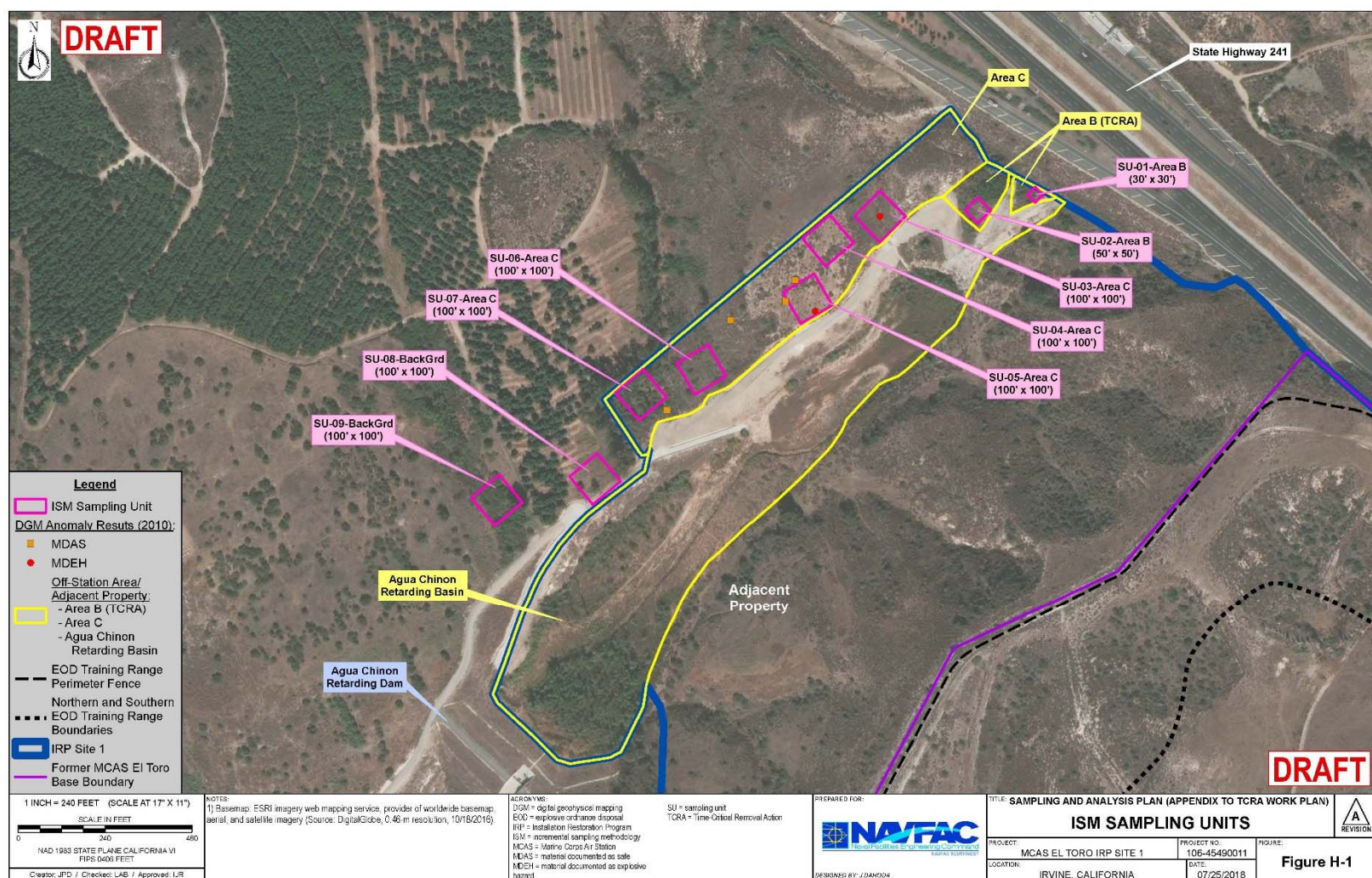
- Sampling unit (SU) placement
- Surficial soil (<4 inches below ground surface) consistent with CSM and 2010 TCRA findings

- **MC Sampling**

- 7 project area Incremental Sampling Methodology (ISM) grids or SUs
- 2 background ISM SUs (for metals only)
- 3 ISM samples from each SU
- 30 or 49 increments per SU depending on size
- ISM grid and SUs placement: biased and random



Technical Approach: Areas B (TCRA) & C



Technical Approach: Areas B (TCRA) & C (cont.)



- **ISM sampling process within each SU**

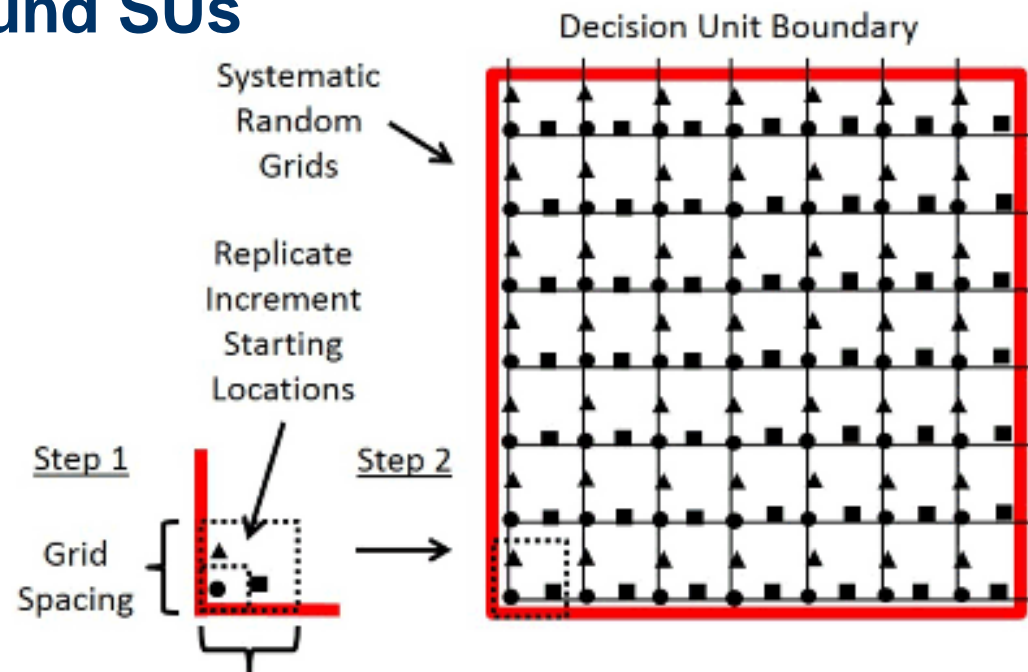
- Systematic random method for increments
- Circles: primary locations
- Triangles: replicate locations
- Squares: triplicate locations

- **Area C and Background SUs**

- 7 x 7 (49-increment) grids
- 100-ft. x 100-ft. SUs

- **Area B (TCRA) SUs**

- 5 x 6 (30-increment) grids
- 50-ft. x 50-ft. SU & 30-ft. x 30-ft. SU



Technical Approach: Areas B (TCRA) & C (cont.)



- **Remove vegetation**
 - Chainsaws, hand saws, hand tools, and armored equipment
- **Excavate top 12 inches of soil**
 - Heavy equipment armored with 2 inches of Plexiglas
 - Machine-mounted grade-control global positioning system
- **Screen soil (Powerscreen)**
 - Magnets on conveyor to help separate metals
 - Each with 2-inch and ½-inch screens
 - 100% of screened material will be spread and scanned with hand-held all-metals locators



Technical Approach: Areas B (TCRA) & C (cont.)



- **Conduct DGM**

- Geophysical system verification
- Data processing and analysis
- Discrete anomalies selection
 - Expected response of a 20-mm projectile to depth
 - Targets selection and reacquisition
 - Real-time kinetic digital global positioning system



- **Complete intrusive investigation**

- Investigate an 18-inch radius to depth
- Re-verify with DGM

- **Backfill**

- Screened soil from Adjacent Property

- **Restore site**

- Mulch from vegetation removal
- Hydroseed with native seed mix



Technical Approach: Agua Chinon Retarding Basin



- **Trim vegetation**
 - Supports equipment access; root-balls remain intact
- **Conduct 100% DGM survey**
- **Complete intrusive investigation**
- **Backfill and restore site**



Contingent Technical Approach



- **Change approach angles with equipment**
- **Use man-portable DGM to map areas**
- **Conduct analog mag-and-dig operations**
- **Complete and document visual inspections**
- **Complete intrusive investigations for all individual targets to depth**



Schedule



- **Issue Draft Final Work Plan – early August 2018**
- **Implement TCRA – late August 2018**
- **Complete TCRA – late September 2018**
- **Issue Draft Removal Action Report – November 2018**

Summary



- **Historical Investigations and Removals**
 - 2002 MEC Characterization
 - 2008 MEC Characterization
 - 2010 TCRA
- **CSM**
 - Release mechanism: kick-outs that resulted in shallow and sparse MPPEH
 - Validated through previous site actions
- **2018 TCRA: Comprehensive Removal Action**
 - MC Sampling (Areas B [TCRA] and C)
 - Excavation and screening of soil (Areas B [TCRA] and C)
 - DGM (All areas)
 - Intrusive investigation to depth
 - Restoration
- **Goal is to achieve an unrestricted use designation**

Acronyms



BEC	Base Environmental Coordinator
BRAC	Base Realignment and Closure
CSM	conceptual site model
DGM	digital geophysical mapping
EOD	Explosive Ordnance Disposal
FS	Feasibility Study
IRP	Installation Restoration Program
ISM	incremental sampling methodology
MC	munitions constituents
MCAS	Marine Corps Air Station
MDAS	material documented as safe
MEC	munitions and explosives of concern
mm	millimeter
MPPEH	material potentially presenting an explosive hazard
Navy	United States Department of the Navy
NWS	Naval Weapons Station
PE	Professional Engineer
PG	Professional Geologist
Range	EOD Training Range
SU	sampling unit
TCRA	time-critical removal action

Navy Contact Information



Marc Smits, PE

BEC for NWS Concord and MCAS El Toro

Desk Phone: (619) 524-4610

marc.smits@navy.mil

Guy Chammas, PG

Lead Remedial Project Manager

Desk Phone: (619) 524-5922

guy.chammas@navy.mil

Rich Pribyl

Contracted Environmental Engineering Support

Desk Phone: (619) 524-5261

richard.pribyl.ctr@navy.mil